

# **Social and Economic Aspects of Planning**

## **Introduction**

### **Pinedale Experience**

PRESENTER: Good morning.

Just a little background. We decided to put Pine -- we've talked about the Pinedale situation in previous courses. And we had it inserted towards the end, and we decided to move it up because, although all of you don't work in areas that are heavily impacted by oil and gas, the impacts associated with oil and gas development provides a good overview for what we're going to talk about in the remainder of the course. And so we thought we would use Pinedale as an example so that we can emphasize some of the planning tools that we'll be talking about, some of the economic tools we'll be talking about later on in the course.

For those of you who are not familiar with Pinedale, Pinedale is located about, what, about 80 miles, I guess, 80 or 90 miles, from Jackson. It's in the northern -- northwestern part of the state. It's about 100 miles north of Rock Springs. So if you have driven across Wyoming and you drive through Rock Springs, if you were to turn north off of I-80 and drive north for about 100 miles, you would be in Pinedale, Wyoming.

The first time I went to Pinedale, I thought it was one of the prettier areas I had ever been to. It's an amazing area. The Wind Rivers are the setting to the east. You've got the Upper Green Valley. And then over the top of -- I forget the name of that pass, Kelly, that drops into Dubois. Union, is that -- Union Pass. Just incredibly spectacular country for the lower 48.

# **Social and Economic Aspects of Planning**

## **Introduction**

### **Pinedale Experience**

Just a little background... the development, the oil and gas development, is -- the concentrated development in Pinedale is south of town. And there are two major fields, the Jonah Field and the Anticline Field. We'll be talking on this slide at least about the Jonah Field.

This is what the Jonah area looked like in 1994, and by 2001, this is what it looked like. And by 2005, this is what the Jonah Field looked like -- looks like.

I believe that was taken on 40 acres -- or, that's a 40-acre spacing. So we've got infill for the Jonah now approved and they can go down to 10 acres, I think -- as low as five. So whether they actually go to five acres or not, I guess, depends on the recovery rate, but they're approved to go on -- and this is all conventional drilling. So it's not directional. Straight drilling.

So if you think of that on 40-acre spacing and then go down to as low as five acres, you can see that it's pretty much an industrial zone, even on 40-acre spacing. It's an industrial zone.

The driving force in Pinedale for the oil and gas boom is a the number of rigs that are operating out there. So I threw this slide in just to show you what's happened in Pinedale, say, from '95 until 2007.

Any idea why -- let's see if I can make this thing work. What's happening here? Why

# **Social and Economic Aspects of Planning**

## **Introduction**

### **Pinedale Experience**

are we getting these dips? Seasonal, right? So their drilling activity, it tapers off in the wintertime and then comes back strong in the summer.

Again, this gives you an idea of where Pinedale is. It's about 100 miles north of Rock Springs, as I mentioned earlier, and this area -- this whole area in here -- actually, the whole area is just -- it's a gorgeous setting. And it was remote. Very remote part of Wyoming until a few years ago, until we really got the oil and gas boom going at an astonishing rate.

The economic effects of energy, the rig count drives everything. It drives -- it drives the need for folks to work in the area. It drives the revenue that's being produced by the oil and gas development. It drives crime. It drives drug use. It drives -- it drives everything.

This is another view of what this area looks like. There's hundreds of different work sites, hundreds of different companies, all tied together by a network of roads. Multiple use -- is this area a multiple use area? What is it? Pardon?

CLASS PARTICIPANT: Sacrifice zones.

PRESENTER: But it's incredibly important from a monetary standpoint, right? I mean, the amount of money being generated both from royalties, from taxes, from income to the companies -- I mean, it's an incredible amount of money. We'll talk about it in a little bit. And also it's producing gas that the country needs.

# **Social and Economic Aspects of Planning**

## **Introduction**

### **Pinedale Experience**

Multiple use? No. You can drive out into this area -- it's interesting. When you drive out into the area, even on a 40-acre spacing, and imagine what it would be like on a five-acre spacing, there's no way you can turn that you're not looking at a road or a well. And the antelope have been -- I was out there one day when you had antelope that you could get as close as to here to the wall from. They're habituated to people. They're habituated to human activity. In fact, I think there was a situation where we had a -- I think it was a large truck hauling water. The antelope are so habituated to the area, they have a speed limit, and the truck driver was driving, and he had an antelope, although it wasn't just one antelope or two antelope or 10 antelope. But I think by the time it was all done, it was over 20, and it's all of this intense activity in an area that had traditionally not had any -- at least development like this. Isn't that right, Kelly, on that --

CLASS PARTICIPANT: Well [inaudible] there are a certain number of prong horn that live there year-round and kind of habituate to the activity and then there are the ones that historically migrated through that area [inaudible] and there's some radio collared animals. Those animals are going around. They'll head into the Jonah Field, do a 180, go back out and go around and outside the field to get to their new range. So there's kind of two effects. And the sage grouse have deserted [inaudible they're gone.

PRESENTER: So the issue on multiple use, it's really interesting to me at least, is when we talk about multiple use, we say multiple use doesn't mean multiple use on every acre, right? Have you heard that argument? Multiple use doesn't mean that you have

# **Social and Economic Aspects of Planning**

## **Introduction**

### **Pinedale Experience**

to have multiple use on every acre. So if this is multiple -- if this isn't multiple use, it's a single use. If you do a logical extension of that argument, next to this we could have an ATV zone with everything wiped out because we don't have to have multiple use on every acre. Or next to that we could have a forest and clear-cut the whole thing because we don't have to have multiple use on every acre.

So when you talk about multiple use, the idea of multiple use not on every acre, and you take it to a logical extension, at least in my mind, I don't know about you guys, but in my mind I question that concept.

For those of you that haven't been on one of the rigs that are out there, they're huge rigs and very efficient. There aren't that many people on the crew. They're running 24 hours a day. They live out there. They supply their own power. They have a whole bank of generators that run on diesel. And you can drive up the highway north of Farson and you'll actually have fog where you never had that before, and so air quality is an issue. Water quality is an issue. Open space is an issue. Sage grouse hab -- everything you can imagine Pinedale has to deal with intense development like this.

Also, these are an incredibly dangerous place to work. We'll talk a little bit about that in a moment.

This is an aerial view. There's about 40 workers per rig. But when you actually go on the platform and watch them drill, it seems to me like there was only -- I toured a

# **Social and Economic Aspects of Planning**

## **Introduction**

### **Pinedale Experience**

Questar rig on the Anticline, and there weren't that many people actually working on the platform, four or five people it seems like.

Again, the monthly Sublette County rig count from 2000 through April 20007, and you can see the growth in the number of rigs.

Workforce shortages... transient work forces, housing costs and population increases.

So what's happened here is it's very difficult to find enough people to work in the fields, and so what you'll have is you'll have folks that will fly in -- they'll actually fly people in.

They'll work a 20 -- 20 days straight, 15 hours a day, and then go home for 10 days and then they'll fly them back in. So you have these rotating crews that are working these long hours. When you're working long hours, how do you stay awake?

So you have transient work forces. Transient work forces, do they have a strong connection to the community? When you come in and you're working 15 hours a day every day for 20 days straight, living either in a man camp or a hotel or out of your pickup or a camper or a fifth wheel, what kind of connection do you have to this area? So these are things that we'll be talking about later on in the class, Joan and Stuart will be talking about the social considerations of how these impacts can be assessed and different tools for assessing what these impacts are.

What's happening? Housing costs, along with population increase. What do you think happened in the little community like Pinedale with a boom like this? What do you think happened to housing? Do you think it's really affordable? No. It's not.

# **Social and Economic Aspects of Planning**

## **Introduction**

### **Pinedale Experience**

Sublette County in terms of the cost of living is the second highest cost of living county in the state of Wyoming right now. Who's number one? Teton. Teton is an interesting county. I remember John Loomis and I were working up there and they just were working on an ordinance that you couldn't build a single-family home larger than 10,000 square feet, and the folks in Teton county were in -- they were outraged. I mean, how can anybody live in a house smaller than 10,000 square feet? Okay. So, Teton, number one, Sublette County number two.

Unemployment rate. What's this showing? You know, the unemployment rate is practically nothing. What impact does that have on local services? Yeah. What impact do you think it has on local services?

CLASS PARTICIPANT: With unemployment rate down, it means people are working and they're bringing revenue to these local businesses.

PRESENTER: When if you own a Subway?

CLASS PARTICIPANT: Can't get workers.

PRESENTER: Can't get workers, right? They're all working in the oil and gas industry. And so if you're trying to hire a clerk at Faler's, it's hard to find somebody. If you're trying to hire somebody to make a sandwich at Subway, you may not find anybody, and

# **Social and Economic Aspects of Planning**

## **Introduction**

### **Pinedale Experience**

the Subway store -- I've been in there and you can't get a sandwich. Yeah?

CLASS PARTICIPANT: What's important is they can't keep deputies on at the Sheriff's Department, which with the increase in population and the drug and crime issues, and they can't keep deputies because they can go work on a rig and make more money. That becomes an issue of its own.

PRESENTER: And they can walk out the door -- sheriff "Bardy" is the sheriff. I was on the committee with him. And he said it's very difficult to keep those folks, you know, working in the Sheriff's Department. One is the money. It's -- it's just strictly a money issue. But there's another issue, is that if you talk to somebody that's lived in Pinedale for a while, and they'll talk about the level of violence in, say, a bar room fight, you know, the sheriff of Sublette County said you would go out to break up a bar room fight and it's a couple cowboys and one knocked the other cowboy's hat off and they're out there arguing. That's not the kind of fights these guys get into. It's a different kind of fight

So, as we mentioned, they strain local services. All of this activity is one-sided. You've got a lot of development occurring that's being driven by the oil and gas industry, but the other sectors, the other traditional sectors, are suffering because it's difficult for them to hire the folks they need to keep their businesses open.

And so what you have is you've got a high cost of living. You have trouble attracting



# **Social and Economic Aspects of Planning**

## **Introduction**

### **Pinedale Experience**

resident workers. Reliance on nonresident workforce. And are these social and economic issues? You know, traditionally we feel -- BLM is a resource agency, and we feel pretty comfortable when it comes to range issues and when it comes to recreation issues and wildlife issues and all of these other issues that we deal with on a regular basis. But when you have this kind of development, do you think these social and economic issues are also important? Absolutely. I mean, the other issues are equally important, but the social and economic issues are also very important.

So what happens? The social effects of growth, loss of community feeling, crime. You have infrastructure issues. Let's talk a little bit about infrastructure issues. When you have development like this and you have a small community and you need more housing, what do you do? You've got to expand your infrastructure. You expand your infrastructure, and you go through this boom, what's the saying, what goes up -- what happens? It comes down. And so you go ahead and build up your infrastructure to accommodate this growth, and then all of a sudden the growth goes away and the folks that lived there are left holding, what? The bag. Right? Who said that. I didn't say that. Okay.

CLASS PARTICIPANT: We've been doing this so many years, it seems [inaudible]

PRESENTER: So you know what I'm talking about.

CLASS PARTICIPANT: Yes.

# **Social and Economic Aspects of Planning**

## **Introduction**

### **Pinedale Experience**

PRESENTER: Okay.

So we're moving from an amenity-led community to a wage-earning community. In other words, Pinedale historically would boom in the summer, during the summer months you would have -- it's a recreation-based community. You would have folks coming in to hike. The Wind Rivers are right there. You've got a big wilderness area. The fishing sun believable. The hunting is great. And now it's sort of moving away from that. And one thing that we didn't even mention is if you're looking at recreation and you're thinking about driving to Pinedale to go fishing and hang out in town and drive up to Fremont Lake and fish and come back and stay in a hotel, go out to eat, how is that going to work out for the folks who are coming there to recreate?

CLASS PARTICIPANT: [inaudible]

PRESENTER: There's no place, right? There's no place for them.

So, we've talked about a lot of these issues, the work schedules -- worker relocation plans. Do you think that these workers want to move to Pinedale? Do they want to pack up their families and move to Pinedale? Does that make it harder to plan? Does it make it harder for the local communities to plan for this growth if the folks aren't planning on moving to Pinedale on a permanent basis? You know, it's an issue.

# **Social and Economic Aspects of Planning**

## **Introduction**

### **Pinedale Experience**

We talked about death and injuries. We haven't talked about per capita income and family income, only in an indirect way. What do you think about per capita income and family income? I mean, some folks would like to move to Pinedale. But what about per capita income and family income? We always hear about these high-paying oil and gas jobs. Yeah?

CLASS PARTICIPANT: Seems like the rig worker would make a lot of money but other people in the family, spouse, might have trouble finding work.

PRESENTER: What if you tracked the per capita income over time and balanced that out against the cost of living index associated with Pinedale? What do you think about the disposable income measured in real -- in real terms? What do you think's happening? Well, their actual income is going up, but what about their disposable income after they pay for all their cost of living? With a did we say about the cost of living in Sublette County? It's number two. So even though there are good paying jobs, the cost of living is high, and so that offsets the fact that you've got these higher paying jobs I don't know that that gets a lot of play, but is that important to understand? Yeah, it is.

CLASS PARTICIPANT: [inaudible] we can't hire people to work in the office in Pinedale because they can't afford to buy a house.

PRESENTER: They may not even be able to find a house, right?

# **Social and Economic Aspects of Planning**

## **Introduction**

### **Pinedale Experience**

CLASS PARTICIPANT: Right.

PRESENTER: Yeah?

CLASS PARTICIPANT: I was just going to say, same situation is mining communities. Winnemucca, Elko, we can't bring employees in because we can't find them places to live. We're working with a local housing group that's doing a housing study, and there's just numerous issues that come to my mind when you talk about family income. I don't know how many mine engineers have come in and predominantly male bringing a wife, spouse, overeducated and usually unemployed in the community because there's no equivalent work for her.

PRESENTER: Right.

CLASS PARTICIPANT: There's just a tremendous amount of issues [inaudible] the difference in this versus the mining is it appears to be longer term. This is going to be, when the wells are drilled, when they put in the gas fields, they don't need as many workers.

PRESENTER: Right.

CLASS PARTICIPANT: The mines are continuing on as the price of gold goes up,

# **Social and Economic Aspects of Planning**

## **Introduction**

### **Pinedale Experience**

more are coming, and we're hitting that housing issue.

PRESENTER: Same issues, though.

CLASS PARTICIPANT: Same issues.

PRESENTER: What about stability of the workforce? What do you think is going on there, whether you're talking about BLM or you're talking about Faler's, which is a grocery store in town, what do you think about the stability of the workforce? Are they a stable workforce? Even in your office, Kelly, you've had --

CLASS PARTICIPANT: Turnover at BLM is 25 to 30% a year.

CLASS PARTICIPANT: That's it?

CLASS PARTICIPANT: Those are pretty good jobs.

PRESENTER: Well, Buffalo, right, there's another example of coal bed methane being developed in the northern part of the state. Huge impacts to a small town. This is overlooking Pinedale, Wyoming. Distribution of revenue. This is an interesting one. We had a county commissioner from Sublette County come into the office within the last month, and very upset that BLM had done a lousy job on the social and economic analysis. One of the issues is the distribution of revenue. In other words, when all of

# **Social and Economic Aspects of Planning**

## **Introduction**

### **Pinedale Experience**

these royalties are collected, the state collects the royalties, talking about a huge amount of money here, and then redistributes it. What do you think about the counties who don't have oil and gas development but there's a big pot of money? Do they want it? Absolutely. What about the counties that are being impacted by oil and gas development? Do they want a bigger share? They do. And so the crux of this argument was that BLM had not taken the analysis far enough. In other words, we hadn't looked at the budgetary considerations associated with this level of development. In other words, we hadn't said that you're going to need to spend so much money on infrastructure, you're going to have to expand your lagoons, you're going to have to expand your water system, you're going to have to build a new safe house, you're going to have to pave Tyler Avenue with six inches of pavement instead of three to handle the heavy traffic. He wasn't talking at that level of detail, but basically, the crux of the argument is we hadn't taken the analysis far enough. We'd miserably failed. Why would he want the analysis taken all the way to that budgetary level? Come on.

CLASS PARTICIPANT: So he has something to go to the state with and say "This is the money I need."

PRESENTER: Absolutely! So when Crook County comes in and says, "We want our share," and Sublette County is saying, "Look, it's what happened to us," he wants something from an unbiased source that says "Look at the impacts that's being created by BLM leasing and issuing APD's." It wasn't necessarily that we had done a bad job, but we hadn't taken the analysis to the point that they could get what they thought was

# **Social and Economic Aspects of Planning**

## **Introduction**

### **Pinedale Experience**

their fair share of that money. Right?

Now, my answer to that is that we don't want to go there because if we do, do you think -- and actually I think -- hopefully he changed his mind before he left, but I said, do you want us to come in and say you need to build a safe house for women but you don't need that swimming pool because instead of building the swimming pool you need to build four new clinics and tell him them exactly how they would spend that money and how much -- you don't need a 500 -- you don't need to expand your infrastructure for 500 new homes. You only need 300 and 150 of them are trailers. They don't want us really telling them that.

So even though he was asking for that, once I started to explain it in that way, he backed off a little bit. But what he really wanted was the information that would allow him to go and ask for their fair share. And so they're having a private contractor do that. So what's incumbent on BLM's part to help them as a springboard to get to where they need to be. Well, what we really need to do is we have to give them -- we have to do a good job of forecasting population growth. We have to do a good job of forecasting employment. We have to do a good job of forecasting the basics that are associated with each of these alternatives so they can then go ahead and take it to the next step and develop their budgetary requirements that would accommodate this level of growth. Does that make sense?

CLASS PARTICIPANT: [inaudible]

# **Social and Economic Aspects of Planning**

## **Introduction**

### **Pinedale Experience**

PRESENTER: He really wasn't talking about social, and we were talking mainly about the budgetary considerations.

One thing is interesting is I gave a presentation in Pinedale, and if you recall, we said the rigs drive everything.

What's next? Plans for new oil and gas development. These communities need to get the best information they can as early as they can with regard to new oil and gas development. And that's not always easy to do. When we had the PAWG, one of the -- the PAWG is the Pinedale Anticline Working Group. There was a spin-off of that, which is the economics group. It was a task group. They had task groups under the Pinedale Anticline Working Group and these were made up of a cross section of folks in the local community, and you had a recreation group and a transportation group and a wildlife group and an air quality group and we had a socioeconomics group. And one thing we wanted was good information. This is the socioeconomic task group for the Pinedale Anticline Working Group. And we wanted good information on future plans, and so actually the Pinedale office went out with a letter asking companies to come in and give them the best information possible on their outyear plans, and it was very difficult to get that information from the companies. They hold that information fairly close. And so, this is something that would be useful and it's not as easy to get as you might think.

Pace of development discussions. This is a huge issue. Why is it such a big issue?



# **Social and Economic Aspects of Planning**

## **Introduction**

### **Pinedale Experience**

Why do you think pace of development is such a big issue?

CLASS PARTICIPANT: [inaudible]

PRESENTER: Right.

CLASS PARTICIPANT: Because of resilience, being able to adapt to things. If it's going at such a quick pace, local communities cannot react very quickly, at least in our neck of the woods. That's one of the major problems. Everything is just moving too fast.

PRESENTER: What do the companies want? Do they want to slow down?

CLASS PARTICIPANT: Nope.

PRESENTER: Do they want to slow down and allow these local communities to catch up? Kelly, do they want to slow that development way down?

CLASS PARTICIPANT: They're not real interested in slowing down, no.

PRESENTER: Are they interested in entering into pace of development discussions?

CLASS PARTICIPANT: In the interest of preserving their image, they'll do it. They're

# **Social and Economic Aspects of Planning**

## **Introduction**

### **Pinedale Experience**

not wild about it, no.

PRESENTER: Okay. But it's an important issue. And here's the argument I've heard. Maybe Kelly's heard it -- I don't want to keep picking on Kelly, but she lives in Pinedale, I don't. The argument I've heard is that if we can develop at a rapid pace, we can get in there, develop and get out, and nobody will ever know we were there. Have you heard that argument? I've heard it over and over again.

CLASS PARTICIPANT: Some version of that, yes.

PRESENTER: Yeah, get in, get it developed, and get out.

CLASS PARTICIPANT: And then the deer can come back.

PRESENTER: And everything will come back. What do you think that will mean for the social and economic aspect of the impacts associated with this? Yeah?

CLASS PARTICIPANT: Up real fast and then crash down.

PRESENTER: There you go. That's what it means. It accentuates the boom, and what does it do to the bust? Accentuates that as well.

CLASS PARTICIPANT: Something I've noticed is it's not like natural resource type

# **Social and Economic Aspects of Planning**

## **Introduction**

### **Pinedale Experience**

impacts, because the social and economic impacts, you -- we don't have mitigation. We don't have rehab after it's done. Like we come back in with natural resources and we make it all better and we try to undo it, but how do we do you know these social and economic impacts?

PRESENTER: We'll talk about that. That's an excellent point. Excellent point.

Yeah?

CLASS PARTICIPANT: What happens when the information provided by the social and the economic analyses conflict? Because from a social and ecological standpoint, this looks like a disaster, but when you look at the economics, this county's supporting to nationwide, not just that county. So, I mean -- if we do social analysis of the county level but we look at the economic analysis for the nation, maybe the economic analysis, benefit-cost, says to go ahead, drill, as much as you can. How do we compare those studies? Because the scale of analysis is so different.

PRESENTER: We'll get into that in more detail later. The short answer is that you have a Trumping occurring. State level interests will Trump a community level and national will Trump both, and I think that's a general philosophy, is national interest overrides some of these local issues and concerns. Yes?

CLASS PARTICIPANT: Two things to keep in mind: One is NEPA requires that we reveal the impacts. It doesn't require that we make them go away. And the second

# **Social and Economic Aspects of Planning**

## **Introduction**

### **Pinedale Experience**

thing is, we've issued these companies a lease. They have a right to go develop this gas and we can't tell them no. We're kind of locked into doing something. So, you know, those are two things to consider when you are throw out the question.

PRESENTER: That's an interesting -- I don't know where we are on time because I'm not keeping track. 15 more minutes? I don't want to rush at the end. But just a quick response to that is even though the national trumps the local, and we -- once we have an area under lease, then they have a legal right, then you have a property right, so you have national issue -- the national concern trumping the local concerns, and at the same time, you've leased it and these companies have a legal right to develop their lease unless we buy them out. So what's happening, just a quick comment on that, is that we've had situations in Colorado, for example, in Jackson County and Grand County -- Jackson county is North Park, Colorado. That's Waldon. There's one community basically in the entire county. The other one is Grand County, Granby. Kremling, I think, is in Winter Park. And we just recently, as I understand it, canceled some of the leases. And what folks are understanding now is that this process starts with a lease, and so if they're opposed to the intense development -- we've got the same thing in Utah. We had the same thing in Montana. We have the same thing going on in Wyoming in the Encampment, Saratoga along the Platte River. Folks are saying, if we're opposed to drilling, then we need to deal with it at the leasing stage before they have that legal right. Because once they have the right to drill -- or once they've leased it, then they have a property right and they can develop -- they have the right to develop their lease.

# **Social and Economic Aspects of Planning**

## **Introduction**

### **Pinedale Experience**